IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

TANG et al.

Group Art Unit: 2612

Examiner: Pope, Daryl C.

Serial No.: 10/716,121

Filed: November 18, 2003

For: UNIVERSAL TIRE PRESSURE MONITOR

Attorney Docket No.: LEAR 04056 PUS

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
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P.O. Box 1450
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Sir:

This is an Appeal Brief for the appeal from the final rejection of claims 1-20 of the Office Action mailed March 29, 2006 for the above-identified patent application.

I. REAL PARTY IN INTEREST

The real party in interest in this application is Lear Corporation ("Assignee"), a Delaware Corporation having a place of business at 21557 Telegraph Road, Southfield, Michigan, 48034, as set forth in the assignment recorded in the U.S. Patent and Trademark Office on March 11, 2004 at Reel/Frame: 015058/0677.

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I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:

August 24, 2006	Jeffrey M. Szuma	Jeffrey M. Szuma
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II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences known to the Appellants, the Appellants' legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-20 are pending in this application. Claims 1-20 have been rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendment after the final rejection was filed.

V. SUMMARY OF CLAIMED SUBJECT MATTER

As described in the specification of the present application in connection with Figure 2, the Applicants' claimed invention is directed to a universal tire monitor (16). The monitor (16) may include a pressure sensor (28), a controller (32), a transmitter (30) and a receiver (34). The controller (32) may store a plurality of manufacturers' codes. In existing TPM systems, manufacturers' codes may be used to identify a signal format including any number of characteristics, such as carrier frequency, modulation scheme, data format and/or encryption technique, for wireless signals (18). Prior to or upon installation of the monitor in a vehicle tire, a program signal (36) is sent to the receiver (34), such as by a technician, either via a remote transmitter (38) or an external interface (40). In this embodiment, the program signal (36) includes a command for use by the controller (32) to select one of the plurality of stored manufacturers' codes. Subsequently, during operation of the TPM system, the

controller (32) controls the transmitter (30) to transmit wireless signals (18) according to the signal format indicated by the selected manufacturers' code. (*See, e.g.*, Specification, p. 6, l. 24 - p. 7, l. 27.)

Alternatively, rather than storing a plurality of manufacturers' codes, the controller (32) may be used to store a particular manufacturer's code received via a program signal (36). Subsequently, during operation of the TPM system, the controller (32) controls the transmitter (30) to transmit wireless signals (18) according to the signal format indicated by the particular manufacturer's code received. In either of these embodiments, rather than being specially configured to operate in a particular TPM system, the tire monitor (16) is universal. That is, the tire monitor (16) has the ability to transmit wireless signals (18) according to any signal format, and can therefore be programmed to operate in any TPM system. (*See, e.g.*, Specification, p. 7, l. 28 - p. 8, l. 14.)

As described in the specification in connection with Figure 3, in another embodiment, the controller (32) may store a plurality of manufacturers' codes and, during operation of the TPM system, control the transmitter (30) to transmit a series of wireless signals (18). Each one of the series of wireless signals (18) is transmitted according to the signal format indicated by a different one of the plurality of manufacturers' codes. In such a fashion, a wireless signal (18) is transmitted by the transmitter (30) for every type of TPM system. With reference to Figure 1, a control module (20) on-board the vehicle (12), including a receiver (24), recognizes one of the series of wireless signals (18) from the transmitter (30). Once again, rather than being specially configured to operate in a particular TPM system, the tire monitor (16) is universal. That is, the tire monitor (16) transmit wireless signals (18) according to a plurality of signal formats for every type of TPM system, and therefore operates in all TPM systems. (*See, e.g.*, Specification, p. 9, l. 6 - p. 10, l. 5, and p. 4, ll. 5-24.)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,087,930 ("the '930 patent").

VII. ARGUMENT

The Rejection Of Claims 1-20 Under 35 U.S.C. § 102(b) As Anticipated By The '930 Patent Should Be Reversed

The Appellants believe that claims 1-20 are not anticipated by the '930 patent. Anticipation is established only when a single prior art reference discloses each and every element of a claimed invention. *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). That is, there must be no difference between the claimed invention and the disclosure of the reference, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

The Appellants believe that a *prima facie* case of anticipation has not been established for the rejection of claims 1-20. In that regard, the Applicants' claimed invention is directed to a universal tire monitor. As set forth in independent claim 1, the monitor comprises a sensor for sensing tire pressure and a transmitter for transmitting a wireless signal including data representing the sensed tire pressure. The monitor also comprises a storage device for storing a plurality of codes, each code comprising at least a data format. The wireless tire pressure signal is transmitted according to at least one of the stored plurality of codes.

As set forth in independent claim 11, the monitor comprises a sensor for sensing tire pressure and a transmitter for transmitting a wireless signal including data representing the sensed tire pressure. The monitor also comprises a receiver for receiving a program signal, the program signal comprising one of a plurality of codes, each code comprising at least a data format. The wireless tire pressure signal is transmitted according to the one of the plurality of codes received by the receiver.

In that regard, as described in the specification of the present application in connection with Figure 2, the universal tire monitor (16) may include a pressure sensor (28), a controller (32), a transmitter (30) and a receiver (34). The controller (32) may store a plurality of manufacturers' codes. In existing TPM systems, manufacturers' codes may be used to identify a signal format including any number of characteristics, such as carrier frequency, modulation scheme, data format and/or encryption technique, for wireless signals (18). Prior to or upon installation of the monitor in a vehicle tire, a program signal (36) is sent to the receiver (34), such as by a technician, either via a remote transmitter (38) or an external interface (40). In this embodiment, the program signal (36) includes a command for use by the controller (32) to select one of the plurality of stored manufacturers' codes. Subsequently, during operation of the TPM system, the controller (32) controls the transmitter (30) to transmit wireless signals (18) according to the signal format indicated by the selected manufacturers' code. (*See, e.g.*, Specification, p. 6, l. 24 - p. 7, l. 27.)

Alternatively, rather than storing a plurality of manufacturers' codes, the controller (32) may be used to store a particular manufacturer's code received via a program signal (36). Subsequently, during operation of the TPM system, the controller (32) controls the transmitter (30) to transmit wireless signals (18) according to the signal format indicated by the particular manufacturer's code received. In either of these embodiments, rather than being specially configured to operate in a particular TPM system, the tire monitor (16) is universal. That is, the tire monitor (16) has the ability to transmit wireless signals (18)

according to any signal format, and can therefore be programmed to operate in any TPM system. (*See, e.g.*, Specification, p. 7, l. 28 - p. 8, l. 14.)

As set forth in independent claim 19, the tire monitor comprises a sensor for sensing tire pressure and a transmitter for transmitting a series of wireless signals including data representing the sensed tire pressure. The monitor also comprises a storage device for storing a plurality of codes, each code comprising at least a data format. Each of the series of wireless tire pressure signals is transmitted according to a different one of the stored plurality of codes.

In that regard, as described in the specification in connection with Figure 3, in another embodiment, the controller (32) may store a plurality of manufacturers' codes and, during operation of the TPM system, control the transmitter (30) to transmit a series of wireless signals (18). Each one of the series of wireless signals (18) is transmitted according to the signal format indicated by a different one of the plurality of manufacturers' codes. In such a fashion, a wireless signal (18) is transmitted by the transmitter (30) for every type of TPM system. With reference to Figure 1, a control module (20) on-board the vehicle (12), including a receiver (24), recognizes one of the series of wireless signals (18) from the transmitter (30). Once again, rather than being specially configured to operate in a particular TPM system, the tire monitor (16) is universal. That is, the tire monitor (16) transmit wireless signals (18) according to a plurality of signal formats for every type of TPM system, and therefore operates in all TPM systems. (*See, e.g.*, Specification, p. 9, l. 6 - p. 10, l. 5, and p. 4, ll. 5-24.)

The '930 patent is directed to a transponder and sensor apparatus for transmitting vehicle tire parameter data. Wireless signals transmitted by the apparatus include a tire identification code, which is data that simply identifies a particular tire. In that regard, Table 1 in the '930 patent simply lists data that may be transmitted as part of a wireless signal.

(*See, e.g.*, '930 Patent, col. 9, l. 27 - col. 10, l. 25.) Significantly, in contrast to the tire monitor of the Applicants' claimed invention, neither that code nor any of the data listed identifies or represents a format according to which wireless signals are transmitted, where the format may include characteristics such as carrier frequency, modulation scheme, data format and/or encryption technique. Instead, the '930 apparatus is specially configured to transmit wireless signals according to the specific signal format or protocol set forth in its control program, and therefore is not universal. (*See, e.g.*, '930 Patent, col. 5, ll. 20-31; col. 8, l. 66 - col. 9, l. 7; col. 10, ll. 26-46.)

Thus, in contrast to independent claim 1, '930 patent fails to teach or suggest a storage device for storing a plurality of codes, each code comprising at least a data format, or a transmitter for transmitting a wireless signal according to one of the stored plurality of codes. Similarly, in contrast to independent claim 19, the '930 patent fails to teach or suggest a storage device for storing a plurality of codes, each code comprising at least a data format, or a transmitter for transmitting a series of wireless signals, each according to a different one of the stored plurality of codes. Still further, in contrast to independent claim 11, the '930 patent fails to teach or suggest a receiver for receiving a program signal, the program signal comprising one of a plurality of codes, each code comprising at least a data format, or a transmitter for transmitting a wireless signal according to the one of the plurality of codes received by the receiver.

As a result, for at least the foregoing reasons, the Applicants believe that independent claims 1, 11 and 19 are not anticipated by the '930 patent. There being no *prima facie* case of anticipation, the Appellants respectfully request that the final rejection of those claims under 35 U.S.C. §102(b) be reversed.

Claims 2-10, 12-18 and 20 depend either directly or indirectly from independent claims 1, 11 and 19, respectively, and include the limitations thereof. As a result, and for at

least the reasons set forth above concerning independent claims 1, 11 and 19, the Applicants believe that claims 2-10, 12-18 and 20 also are not anticipated by the '930 patent. Accordingly, the Appellants respectfully request that the final rejection of those claims under 35 U.S.C. §102(b) also be reversed.

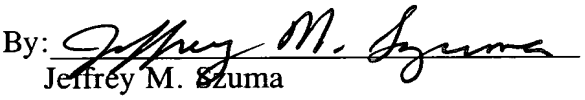
CONCLUSION

In view of the foregoing, the Appellants respectfully request that the Board reverse the final rejection of claims 1-20 under 35 U.S.C. §102(b) as anticipated by the '930 patent.

The fee of $ 500.00 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2) is enclosed. Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

Tang et al.

By: 

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Enclosure - Appendices

VIII. CLAIMS APPENDIX

1. (Original) A universal monitor to be mounted in a tire of a vehicle, the monitor for use in a remote tire pressure monitoring system for the vehicle, the monitor comprising:

a sensor for sensing tire pressure;

a storage device for storing a plurality of codes, each code comprising at least a data format; and

a transmitter in communication with the sensor and the storage device, the transmitter for transmitting a wireless signal including data representing the sensed tire pressure, wherein the wireless signal is transmitted by the transmitter according to at least one of the stored plurality of codes.

2. (Original) The monitor of claim 1 further comprising a receiver in communication with the storage device, the receiver for receiving a program signal for use in selecting one of the plurality of codes according to which the wireless signal is transmitted by the transmitter.

3. (Original) The monitor of claim 2 wherein the receiver comprises a port for receiving the program signal.

4. (Original) The monitor of claim 3 further comprising an external interface for connecting to the port and transmitting the program signal.

5. (Original) The monitor of claim 2 wherein the program signal has a low frequency, and the receiver comprises a low frequency receiver.

6. (Original) The monitor of claim 2 further comprising a remote transmitter for transmitting the program signal for receipt by the receiver.

7. (Original) The monitor of claim 6 wherein the program signal has a low frequency, the receiver comprises a low frequency receiver, and the remote transmitter comprises a low frequency transmitter.

8. (Original) The monitor of claim 1 wherein the wireless signal is transmitted by the transmitter according to each of the stored plurality of codes.

9. (Original) The monitor of claim 1 further comprising a receiver for mounting on the vehicle, the receiver for receiving the wireless signal transmitted by the transmitter, wherein the receiver is configured to recognize a wireless signal transmitted according to one of the plurality of codes.

10. (Original) The monitor of claim 2 further comprising a receiver for mounting on the vehicle, the receiver for receiving the wireless signal transmitted by the transmitter, wherein the receiver is configured to recognize a wireless signal transmitted according to one of the plurality of codes.

11. (Original) A universal monitor to be mounted in a tire of a vehicle, the monitor for use in a remote tire pressure monitoring system for the vehicle, the monitor comprising:

a sensor for sensing tire pressure;

a receiver for receiving a program signal, the program signal comprising one of a plurality of codes, each code comprising at least a data format; and

a transmitter in communication with the sensor and for transmitting a wireless signal including data representing the sensed tire pressure, wherein the wireless signal is transmitted according to the one of the plurality of codes received by the receiver.

12. (Original) The monitor of claim 11 further comprising a storage device in communication with the receiver and the transmitter, the storage device for storing the one of the plurality of codes received by the receiver.

13. (Original) The monitor of claim 11 wherein the program signal has a low frequency, and the receiver comprises a low frequency receiver.

14. (Original) The monitor of claim 11 further comprising a remote transmitter for transmitting the program signal for receipt by the receiver.

15. (Original) The monitor of claim 14 wherein the program signal has a low frequency, the receiver comprises a low frequency receiver, and the remote transmitter comprises a low frequency transmitter.

16. (Original) The monitor of claim 11 wherein the receiver comprises a port for receiving the program signal.

17. (Original) The monitor of claim 16 further comprising an external interface for connecting to the port and transmitting the program signal.

18. (Original) The monitor of claim 11 further comprising a receiver for mounting on the vehicle, the receiver for receiving the wireless signal transmitted by the transmitter, wherein the receiver is configured to recognize a wireless signal transmitted according to the one of the plurality of codes.

19. (Original) A universal monitor to be mounted in a tire of a vehicle, the monitor for use in a remote tire pressure monitoring system for the vehicle, the monitor comprising:

a sensor for sensing tire pressure;

a storage device for storing a plurality of codes, each code comprising at least a data format; and

a transmitter in communication with the sensor and the storage device, the transmitter for transmitting a series of wireless signals including data representing the sensed tire pressure, wherein each of the series of wireless signals is transmitted according to a different one of the stored plurality of codes.

20. (Original) The monitor of claim 19 further comprising a receiver for mounting on the vehicle, the receiver for receiving the series of wireless signals transmitted by the transmitter, wherein the receiver is configured to recognize one of the series of wireless signal transmitted according to one of the plurality of codes.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None